

HEALTH ASSESSMENT
(Westlake Landfill)

DRAFT

The Westlake Landfill site, located near Bridgeton, St. Louis County Missouri, has been found to be contaminated with 4000 tons of chlordane, trichloroethylene and toluene, and 7,000 tons of low level uranium ore wastes. Missouri Department of Natural Resources personnel have characterized the site containment and diversion system as leaking and unsound. Information supplied did not contain concentrations of contaminants.

Chlordane is a broad spectrum insecticide that has been observed to cause the following symptoms: blurred vision, confusion, ataxia, delirium, coughing, abdominal pain, nausea, vomiting, diarrhea, irritability, tremors, convulsions, anuria, and cancer in laboratory animals. It attacks the central nervous system, eyes, lungs, liver, kidneys, and skin. TCE or trichloroethylene is an animal carcinogen and is also capable of causing the following symptoms: irritation of the eyes, nose and throat; dermatitis; headache, dizziness, vertigo, tremors, nausea and vomiting, irregular heartbeat, sleepiness, fatigue, blurred vision, unconsciousness, and death. Damage occurs to the respiratory system, heart liver, kidneys, and central nervous system. Toluene has been observed to cause irritation of the eyes, respiratory tract, and skin; dermatitis, headache, dizziness, fatigue, muscular weakness, drowsiness, incoordination, staggering gait, skin paresthesia, collapse and coma.

Uranium is reported to cause adverse health effects in two ways: toxic chemical effects including damage to the kidney and liver, pneumoconiosis, pronounced changes in the blood and generalized injury; and radiation effects including lung cancer, osteosarcoma, and lymphoma.

Analysis of the rates of fetal death, low birth weight, and malformations for 1972-1982 showed no rate significantly higher than the state average.

A well survey and water sampling has been completed and an exposure questionnaire is at present being administered to selected residents surrounding the site in conjunction with a survey of all hazardous waste sites in the State by the Missouri Department of Health, Bureau of Environmental Epidemiology. This investigation has yielded the following information concerning Westlake Landfill:

There are only four wells still in use in the area that are down gradient from the site. One is used only occasionally and one is not used for potable water at all. None of the wells sampled had detectable amounts of any of the chemicals disposed of at the site. None of the residents questioned so far appeared to have any adverse health effects caused by materials disposed of at the site.

Based on available information, a health threat exists due to the toxic effects of chemicals and low level uranium wastes buried at the site and the possibility that off site migration of the materials might occur because of the unsound condition of the site. While there is no evidence of past or present exposure, a potential does exist for future exposure based on the possibility that off site migration may occur. Sampling and corrective containment and diversion should continue at this site until risk to the public health can more accurately be determined.

8/85

Site: West Lake CU
ID # MBD07990932
Break: 17.8
Other: 8-7-85
CRM

40241233



SUPERFUND RECORDS

DNR 0245